

dicted combination therapy with ATX, LAS, and A2As. This suggests these medications may be used differently in clinical practice.

PMH20

FACTORS ASSOCIATED WITH HIGHER HEALTH CARE RESOURCE USE AMONG PATIENTS WITH BIPOLAR DISORDER: RESULTS FROM A LARGE MULTINATIONAL LONGITUDINAL STUDY (WAVE-BD)

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OBJECTIVES: Bipolar disorder (BD) is associated with a high burden on healthcare resources. A secondary objective of the Wide Ambispective study of the clinical management and burden of bipolar disorder (WAVE-bd) was to assess healthcare resource utilization among BD patients. **METHODS:** Multinational, multicenter, non-interventional, cohort study of patients diagnosed with BD-I/BD-II with ≥ 1 mood episode in the preceding 12 months (retrospective data collection) followed by a minimum 9 months' prospective follow-up. Study population was representative of BD populations from 8 European and 2 Latin American countries. Multivariate analyses determined factors associated with higher incidence of resource use (number of visits per year), measured by parameter estimates (ParEst [95% CI]) > 0 . **RESULTS:** Multivariate analyses included 2,896 patients. Factors associated with a higher incidence of hospitalizations included: psychotic symptoms during the study index episode (0.08 [0.02; 0.14]); a higher number of previous hospitalizations (0.04 [0.03; 0.04]); receiving anxiolytics during the study index episode (0.12 [0.06; 0.17]); enrolment in hospital settings (0.13 [0.03; 0.23]). The incidence of emergency room visits was increased in patients with: rapid cycling (0.13 [0.06; 0.19]); a history of suicide attempts (0.08 [0.02; 0.14]); a higher number of previous hospitalizations (0.01 [0.01; 0.02]). The incidence of programmed psychiatrist visits was increased in patients with: rapid cycling (0.90 [0.36; 1.44]); with a higher number of previous hospitalizations (0.11 [0.06; 0.16]); enrolled in private practices (1.31 [0.07; 2.55]); receiving antipsychotics during study index event (0.81 [0.37; 1.25]). Overall, clinical factors associated with higher incidence of resource use included: rapid cycling (2.22 [0.84; 3.61]); co-morbidity of thyroid disease (2.21 [0.49; 3.92]); a higher number of previous hospitalizations (0.25 [0.12; 0.38]); receiving antipsychotics during the study index episode (1.63 [0.50; 2.76]). **CONCLUSIONS:** Several clinical factors are associated with higher resource utilization in BD patients. These factors could aid in identification of high-risk patients.

PMH21

A SYSTEMATIC REVIEW OF EFFECT OF ANTIPSYCHOTIC AGENTS ON MORTALITY IN SCHIZOPHRENIA

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OBJECTIVES: Mortality among schizophrenia patients is higher than the general population. Antipsychotics are the mainstay of schizophrenia treatment but have been linked to life threatening adverse events. Therefore the objective of the study was to systematically review available literature examining the risk of mortality associated with antipsychotic use among schizophrenia patients. **METHODS:** Systematic review of English literature was conducted in MEDLINE, PubMed, PsychInfo, EMBASE, Cochrane databases, and IPA from 1966 to October 2011 using nine element eligibility criteria to identify studies examining the association between antipsychotic use and mortality. The primary inclusion criteria involved diagnosis of schizophrenia, exposure to antipsychotics, at least one year follow up, and ascertainment of mortality. Findings from case-control, cohort, and controlled trial studies were abstracted for evidence table preparation and possible meta-analyses. **RESULTS:** Overall sixteen studies were included after employing nine element eligibility criteria. The studies were heterogeneous in terms of study designs; follow up period, and control of selection bias and confounding. Consequently meta-analysis was not conducted. Nine out of sixteen studies concluded increased risk of mortality among antipsychotic users compared to non-users. Three out of four studies examining the antipsychotic polypharmacy found significant positive effect on mortality. One out of two studies examining the compliance with antipsychotics found negative effect on mortality. One out of two studies examining association of antipsychotic dosages found significant association with increased mortality. One study ascertained stable association with antipsychotic treatment intensity and increased cardiovascular mortality while other found no significant association. The follow up period varied from 1 to 17 years. Prospective studies controlled for lifestyle related factors while retrospective studies for some comorbidities and co-medications. **CONCLUSIONS:** Literature review revealed that antipsychotic use and antipsychotic polypharmacy increased the risk of mortality. Well designed observational studies accounting for selection bias and confounding are needed to establish the relationship.

PMH22

CORRELATES OF DROPOUT FROM COMMUNITY-BASED METHADONE MAINTENANCE TREATMENT PROGRAM IN INDONESIA

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OBJECTIVES: To study factors associated with risk of dropout among heroin addicts enrolled in a community-based methadone maintenance treatment (MMT) clinic in Solo, Central Java, Indonesia. **METHODS:** This was an ambi-directional cohort

study. The index date was patients' first entry identified from medical records. Patients enrolled from September 2009 were followed up until departure from the clinic or otherwise censored in May 2011. Other data collected were methadone doses, risk behaviour, and sociodemographic characteristics. Kaplan-Meier method was used to estimate retention rate and Cox proportional hazard regressions were used to determine factors associated with dropout from treatment. **RESULTS:** Ninety-eight patients aged 31.6 years old on average contributed to 14,804 person-days of follow up. The retention rate was 24.2% after 21 months with median retention time of 78 days. The median and maximum dose were 43.1 mg and 150 mg, respectively. Multivariate analysis showed that methadone dose below 80 mg (HR=2.4, $p=0.014$, 95% CI=1.2-4.8) and absence of family support (HR=5.0, $p<0.001$, 95% CI=2.4-10.6) were significantly associated with risk of dropout. HIV status, overdose history, criminal record, duration of addiction, distance from clinic, marital status, and employment were not statistically significant predictors of dropout. **CONCLUSIONS:** Despite high prevalence of injecting drug users (IDUs) in the area, low retention rate of the MMT clinic indicates that the community-based program might have been suboptimally utilised or else poorly managed. Attaining maintenance phase at a minimum dose of 60 mg was insufficient to ensure compliance. Health workers should maintain relationships with patients' family to help support and monitor the treatment. Similar studies in hospital or correctional institution settings and/or other areas are needed to confirm the findings as well as economic analyses to anticipate waste of resources.

MENTAL HEALTH – Cost Studies

PMH23

IMPACT OF REFILL AND SAVE PROGRAM ON ADHERENCE TO DESVENLAFAXINE AND EXTENDED RELEASE VENLAFAXINE HCL

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OBJECTIVES: Depressive disorders affect ~35 million US adults annually. A large US health plan offers some members a "Refill and Save Program" (RSP), with discounted copayments for desvenlafaxine (DSV) and extended-release venlafaxine (VENXR) when refilled within 30 days after previous fill run-out. This study compared adherence between RSP and non-RSP cohorts. **METHODS:** This retrospective claims database study examined adult commercial members with ≥ 1 claim for DSV or VENXR from October 1, 2009 – March 31, 2010; the first claim date was index date. Members with schizophrenia were excluded. Members were continuously enrolled for 6 months pre-index and 9 months post-index. Proportion of days covered (PDC) on index antidepressant was modeled with ordinary least-squares regression, controlling for index antidepressant, naïve antidepressant use, demographic and plan characteristics. Subset analysis was conducted on naïve and continuing index antidepressant users and on subjects with no change in post-index RSP exposure. **RESULTS:** The study population included 46,138 members with mean age 48 ± 12 years and 75.3% female, divided between RSP ($n=28,925$) and non-RSP ($n=17,213$). 21.4% were naïve to their index antidepressants. Mean PDC was 69% in RSP, 65% in non-RSP ($p<0.001$). Regression results showed PDC was 6.5 percentage points higher ($p<0.001$) in the RSP versus non-RSP cohort. PDC in RSP cohort was 8.2 percentage points higher ($p<0.001$) among naïve index antidepressant users, and 6.4 percentage points higher ($p<0.001$) among continuing users. Analyses on those with no change in post-index RSP exposure yielded similar significant results but with smaller effect. **CONCLUSIONS:** The RSP cohort, versus non-RSP, had higher index antidepressant PDC. These results suggest that copayment discounts may have a positive impact on adherence to desvenlafaxine and extended-release venlafaxine HCL.

PMH24

DIFFERENCES IN HEALTH CARE UTILIZATION AND ASSOCIATED COSTS BETWEEN PATIENTS PRESCRIBED VERSUS NOT PRESCRIBED OPIOIDS DURING AN INPATIENT OR EMERGENCY DEPARTMENT VISIT

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OBJECTIVES: Compare health care resource utilization (HCRU) and costs between patients prescribed opioids versus those who were not during emergency department (ED) or inpatient visits. **METHODS:** Patients with ED/inpatient visits were selected from the MarketScan Commercial and Medicare Supplemental Database linked with the MarketScan Hospital Discharge Database (1/12007–9/30/2009). Patients prescribed opioids in the ED/inpatient setting were assigned to the 'Opioid Patient (RxOP)' cohort. The first prescription date was the index date. Among patients not prescribed opioids, the 'Non-Opioid Patient (NoRxOP)' cohort, a random date between the first ED/inpatient admission and 30SEPT2009 served as the index date. Additional inclusion criteria were: age older than 12 years at index date, and 12 months of continuous enrollment before and after the index date. Patients with opioid prescriptions during the pre-index period were excluded. Differences in patients' age, gender, geographic region, comorbidities, and HCRU during the pre-index period were adjusted by 1:1 propensity score (PS) matching (PSM). **RESULTS:** Overall, opioids were prescribed in 56% of patients in ED, and 71% in inpatient setting. After excluding patients with pre-index opioid use ($N=163$), among 27,599 eligible patients, 68% (RxOP: $N=18,819$) were prescribed opioids, and 32% (NoRxOP: $N=8,780$) were not. The majority of patients (96%, $N=18,031$) were prescribed immediate-release opioids and 4% ($N=788$) extended-release opioids (LAO use slightly higher in ED versus inpatient, 6.5% versus 3.7%, $p<0.01$). Among the 5099 PS matched patients, adjusted results showed that RxOP patients had more inpatient